

FIG. 1

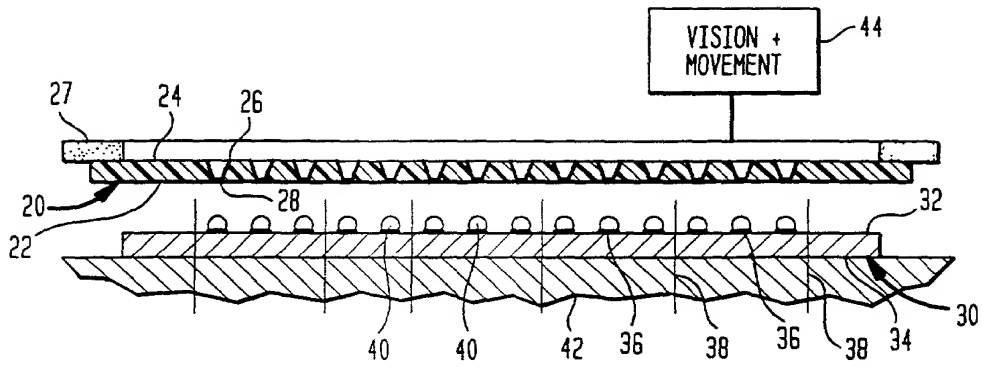


FIG. 2

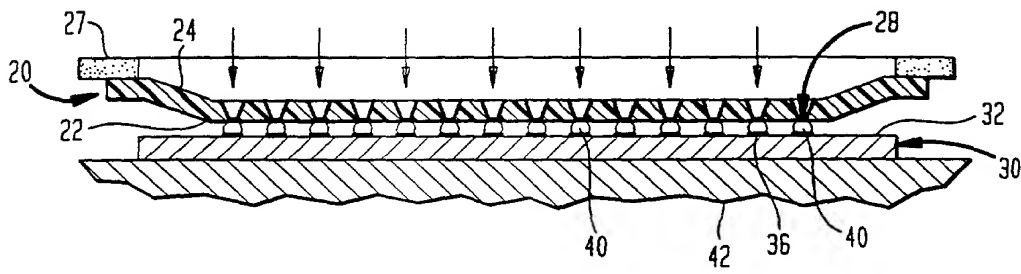


FIG. 3

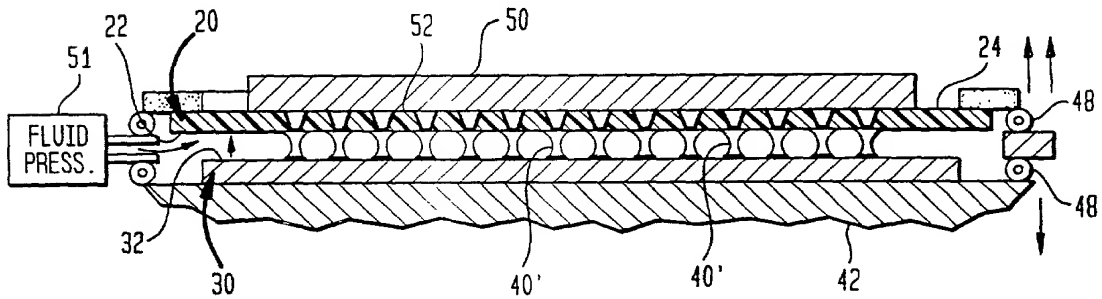


FIG. 4

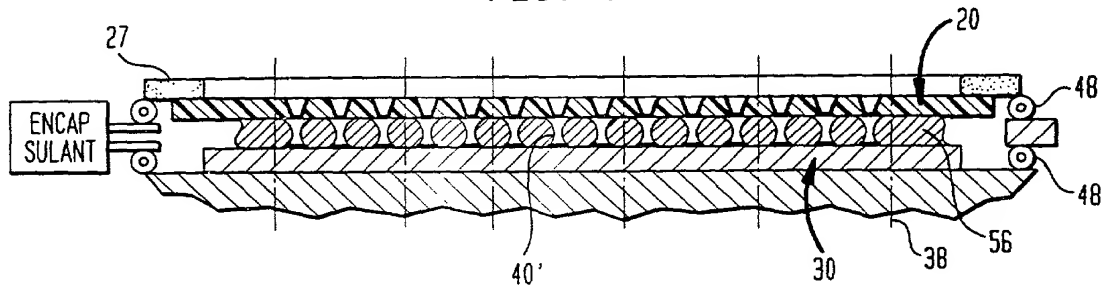
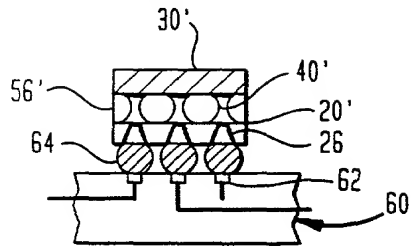


FIG. 6



This diagram shows a second embodiment of the device. It features a top substrate 120 with a top layer 127 and a bottom layer 126. A layer 128 is positioned between the top and bottom layers. A bottom substrate 130 is located below the top substrate, with a bottom layer 132 and a top layer 136. A series of solder bumps 140 connect the bottom layer 132 of the bottom substrate to the bottom layer 126 of the top substrate.

A cross-sectional view of a substrate assembly 127. The assembly consists of a top layer 127, a middle layer 156, and a bottom layer. A series of protrusions 140' are formed in the middle layer 156, extending upwards towards the top layer 127.

FIG. 10

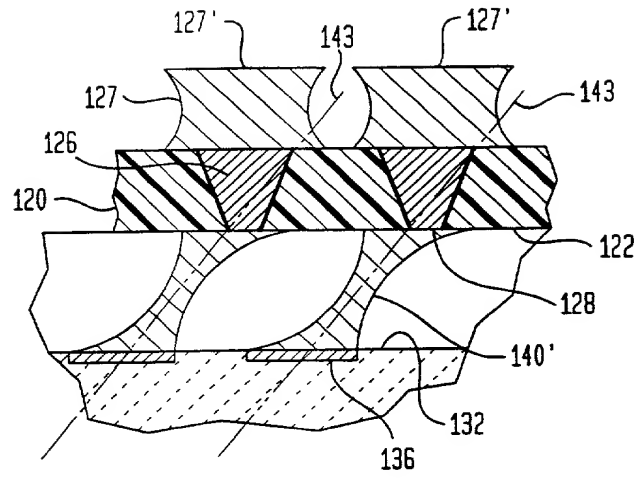


FIG. 11

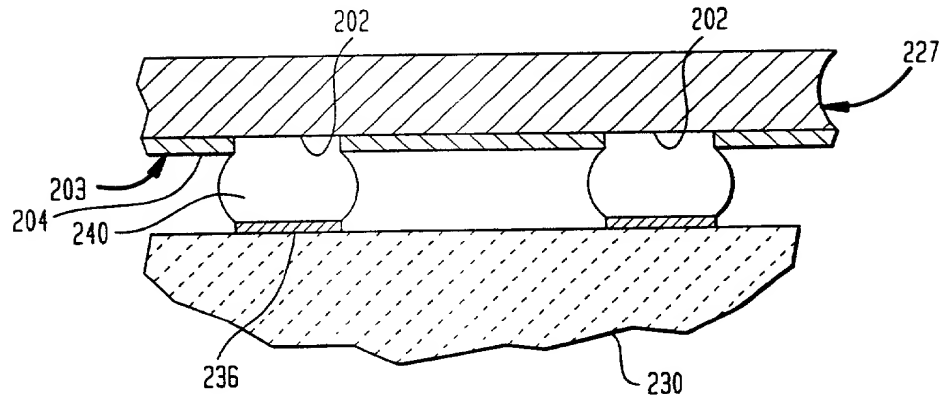


FIG. 12

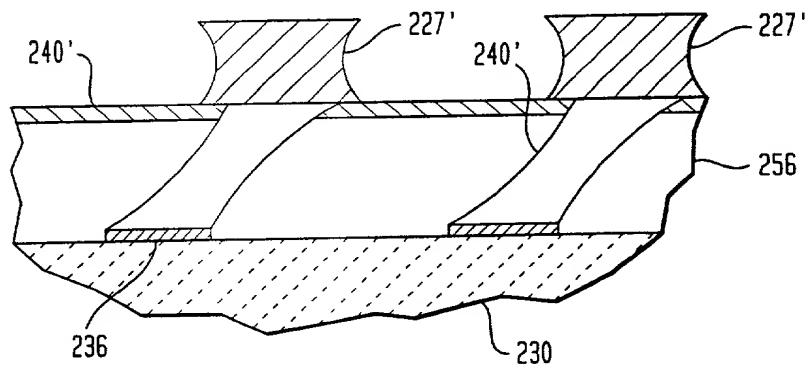


FIG. 13

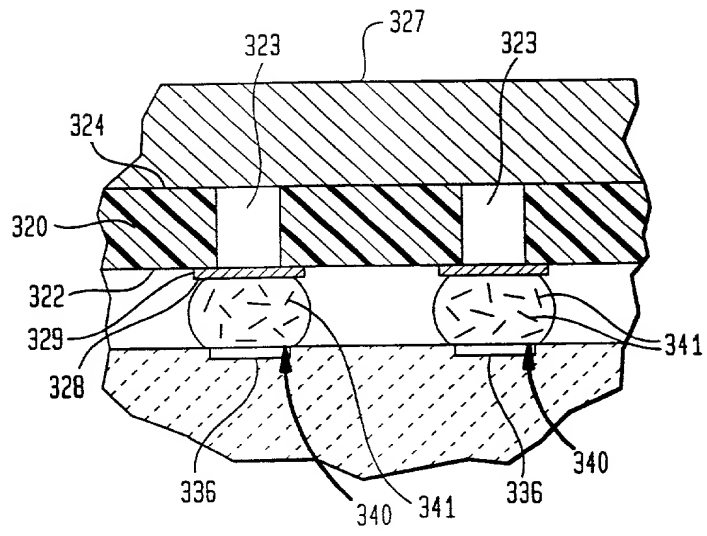


FIG. 14

